## F. Independent Research and Development (IR&D) Program



The purpose of the Department of Defense (DoD) IR&D Program is to encourage IR&D spending by industry to address defense needs for superior technologies at affordable prices and to ensure timely and effective use of these technologies in defense applications. IR&D is IR&D is research and development undertaken by defense contractors on their own initiative without direct Government funding. IR&D costs incurred by contractors

are recognized by the DoD as necessary costs of doing business and are reimbursable as indirect expenses on covered contracts to the extent that these costs are allocable, reasonable, and not otherwise unallowable by law. Approximately half of IR&D expenses are currently reimbursed as indirect costs under defense contracts.

The law prohibits the DoD from prescribing regulations that would "infringe on the independence of a contractor to choose which technologies to pursue in its independent research and development program." The focus of the IR&D Program is on promoting communications between the DoD and industry regarding defense technological needs and IR&D technological accomplishments. By communicating technological needs and priorities to industry, the DoD influences industry's IR&D spending. Industry welcomes this information as a means of identifying future defense market opportunities.

Even though IR&D is neither funded nor managed directly by the DoD, IR&D constitutes a significant portion of R&D activities in support of defense needs. Annual IR&D investment by major defense contractors has averaged \$2.9 billion since 1995. The amount of this investment mirrors changes in defense contract spending. IR&D expenditures peaked between 1984 and 1992, averaging nearly \$5 billion annually. IR&D activity has declined substantially since 1992 as the market for defense goods and services has shrunk.

## **DoD Management of IR&D**

DoD management of IR&D activities has undergone significant changes during the past decade, following amendments to IR&D statutory language in the Defense Authorization Acts for FY91 and FY92/93. Prior to these amendments, the DoD controlled IR&D activities by limiting allowable costs, by negotiating reimbursement ceilings, and by conducting formal reviews of IR&D plans and activities. The statutory revisions broadened the definition of allowable IR&D costs to encompass virtually any type of R&D, phased out negotiated ceilings on IR&D reimbursements, and eliminated the requirement for technical review of IR&D activities. The changes have resulted in reduced DoD control of IR&D spending and reduced DoD oversight of IR&D activities.

DoD Directive 3204.1 establishes the Technical Coordination Group (TCG) to provide oversight for the DoD IR&D Program and to promote communications between industry and the DoD concerning DoD's technological needs and industry's IR&D

accomplishments. The TCG is composed of senior science and technology (S&T) managers form the Military Departments and is chaired by a representative of the Director of Defense Research and Engineering (DDR&E) in the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. The TCG is supported by the IR&D Working Group, which includes representatives from the Defense Technical Information Center (DTIC), Defense Procurement, and the Military Departments and is chaired by the IR&D Program Manager in DDR&E. The individual Military Departments are responsible for technical interaction with contractors to explain DoD science and technology needs and to understand contractor IR&D accomplishments.

## **IR&D Program Action Plan**

During FY00, the IR&D Program developed and began implementation of an action plan to revitalize the IR&D Program. The Plan emphasizes guiding IR&D investments and utilizing IR&D technical achievements. It focuses on four objectives:

- To improve IR&D Program policy, management, and planning
- To promote effective DoD use of technologies developed through IR&D efforts
- To improve Government/industry communications on the DoD's S&T goals and IR&D projects; and
- To evaluate other measures to increase the effectiveness of IR&D efforts.

The plan was developed by the IR&D Working Group with substantial input from industry and was approved for implementation by the TCG.

Implementation is a shared responsibility of the Office of the Secretary of Defense, the Military Departments, and the Defense Technical Information Center. Industry involvement is being encouraged through participation in IR&D Working Group activities. The widespread involvement in developing and implementing this plan reflects the importance of IR&D activities to both the DoD and defense industry.

## **IR&D** Database

A major resource of the IR&D Program is the IR&D database maintained by the Defense Technical Information Center (DTIC). This database contains IR&D project descriptions provided (voluntarily) by major defense contractors. DoD employees search the IR&D database to identify IR&D projects that could fulfill defense requirements and to avoid undertaking duplicative R&D activities. The database of current projects contains approximately 4000 project descriptions representing IR&D expenditures of more than \$4 billion.